



PCS NITROGEN OHIO, L.P. P.O. BOX 628, LIMA, OHIO USA 45802-0628
PHONE: (419) 226-1200 FAX: (419) 226-1274

Mr. James Entzminger
Chemical Emergency Preparedness and Prevention Section (SC-6J)
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

January 11, 2007

Mr. Entzminger:

On December 27, 2006, the facility received a letter from your office requesting information related to the estimated EPCRA Toxic Release Inventory for the PCS Nitrogen Ohio L.P. facility in Lima, Ohio. The letter requested additional information about the anhydrous ammonia emission. The ammonia plant is a continuous operation as is the urea production unit. Contrary to EPA's referenced letter that uses 260 operating days per year, 365 operating days is closer to typical for this facility.

In July 1993 and in 1998 updated for ownership change, the facility submitted a Continuous Release Report to Mr. William Sandstrom (reference number 192133). The Continuous Release Report was developed from the TRI estimated emissions and reflect the Lima operations. A copy of the report is attached for your review.

If there is additional information needed, please feel free to contact Mr. Joseph Bianco at 419/226-1351.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jean Phaneuf", is written over a light blue horizontal line.

Jean Phaneuf
Agent for PCS Nitrogen Ohio L.P.

cc: J. Bianco
D. Johnson (PCS)
W. Schimming (PCS)



BP CHEMICALS

BP Chemicals Inc.
Ft. Amanda Road
P.O. Box 628
Lima, Ohio 45802-0628
(419) 226-1200

VIA OVERNIGHT MAIL

Mr. William Sandstrom
Office of Chemicals Emergency Preparedness
and Prevention (SC-6J)
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, Illinois 60604

August 25, 1998

Re: Notification of Continuous Release for BP Chemicals Inc. - Lima Facilities
Nitrogen Manufacturing Units Ownership Clarification

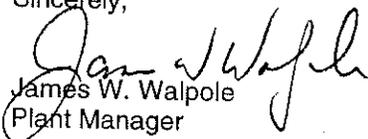
Dear Mr. Sandstrom

BP Chemicals Inc. submitted a Notification of Continuous Release identified by reference number 192133. In this report, the production units associated with continuous releases are identified individually. These units comprise the BP Lima Integrated Complex. The operating units associated with nitrogen fertilizer production has been sold to PCS Nitrogen Ohio L.P. BP Chemicals Inc. remains the operator with PCS Nitrogen Ohio L.P. being the owner of the Urea, Blending and Shipping, Ammonia, and Nitric Acid production units. BP Chemicals is the owner and operator of the Barex, Acrylo II, Offsite and Catalyst production units.

Annual reports such as the SARA 313 reports, RCRA annual reports and Clean Air Act reports are submitted by BP Chemicals. However the PCS Nitrogen Ohio L.P. and BP Chemicals Inc. have two separate reports and identification numbers within these programs. The reported quantities in the Continuous Release Notification identified all emissions from the complex. These estimates have not changed significantly and the segregation of the units is clearly stated in the notification document. As indicated in the telephone conversation between yourself and Joseph Bianco on August 24, 1998, the release estimates in the report are associated with individual units, as such, the notification will not need to be resubmitted as two separate facilities.

If there is more information needed by your office or any questions concerning this issue, please contact Mr. Joseph F. Bianco at 419/226-1351.

Sincerely,


James W. Walpole
Plant Manager

Mr. Randy Ferrara
Mr. Joseph Bianco
File GE11-98



BP CHEMICALS

BP Chemicals Inc.
Ft. Amanda Road
P.O. Box 628
Lima, Ohio 45802-0628
(419) 226-1200

VIA OVERNIGHT MAIL

Mr. W. Sandstrom
Office of Chemical Emergency Preparedness
and Prevention (HSC-95)
U. S. Environmental Protection Agency
Region V
77 W. Jackson Blvd.
Chicago, IL 60604

July 30, 1993

Re: Notification of Continuous Releases for
BP Chemicals Inc. - Lima Facilities

Dear Mr. Sandstrom:

Per our conversation, BP Chemicals has modified the format of our continuous release notification of June 28, 1993 to reflect the additional source data you requested. In particular, the following modifications have been made:

1. The tables listing the individual continuous releases from each contiguous process unit identify the activity that results in the release, i.e., tank vent, process stack, fugitive source, point source. This information was in the previous notification, but we have further clarified this point.
2. On the general information page for each contiguous process unit, we have added a paragraph on how we established the pattern of the release and the calculated release estimate. This information was also contained in our May 19, 1993 submittal.
3. We have expanded the tables listing the individual continuous release sources to include both the lower bound and upper bound of the normal range and the total annual quantity released estimates. In addition, we have clarified the tables to show the number of releases per year (for continuous sources the number of hours per year; for batch sources, the number of batches per year). For all sources, the releases can occur during all twelve months of the year as indicated on these tables.
4. We have clarified the table which shows the calculation of the SSI trigger for the nine chemicals to which this applies. The support for this table is found in the tables listing the individual continuous releases from each contiguous process unit.

If there are any further questions on BP Lima Chemicals' continuous release notification, please call me at 419/226-1666.

Sincerely,

K. P. Keckler
Project Manager

KPK:ll

cc: R. A. DeLeonardis (w/o attach.)
J. F. Bianco (w/o attach.)

File GE11-93
KPK93/WS0730.doc

BP Chemicals, Inc.
Lima, Ohio
Notification of Continuous Release of Hazardous Substances
Pursuant to Section 103(f) of CERCLA
Reported By Area Source Designation

General Information

Facility Name: BP Chemicals, Inc.
Facility Location: Lima, Ohio
Facility Address: Fort Amanda and Adgate Roads -- Lima, Ohio 45804
Mailing Address: P.O. Box 628 -- Lima, Ohio 45802-0628
County: Allen **Township:** Shawnee **Section:** SE/4 Section 2; NE/4 Section 11
Facility Location: Longitude 84° 07' 46" W ; Latitude 40° 43' 0" N
Facility Dun & Bradstreet Number: 03-959-6507
Responsible Official: James W. Walpole
Plant Manager
Telephone Number: 419/226-1200
419/226-1394

Population Density: More than 1,000 persons within one mile radius. An area map is attached.

Population Area: The facility is located in an urban area. Schools, hospitals and retirement communities are located within a one-mile radius of this facility. The nearest potentially sensitive locations are as follows:

- Lima Central Catholic High School
- St. Rita's Medical Center
- Whittier School
- Shawnee Manor Nursing Home
- Faurot School
- Shawnee Children's Program
- 7th Day Adventist Elementary School
- Lincoln Elementary School
- Hanley House Nursing Home

Water Body: Ottawa River; 50 year average flow = 126 cfs

APPLICABLE SITE PERMITS:

USEPA ID Number: OHD042157644

OHIO EPA APS Premise Number: 0303030015

Ohio EPA UIC Permit Numbers: UIC 03-02-003-PTO-1, UIC 03-02-004-PTO-1,
UIC 03-02-005-PTO-1, UIC 03-02-006-PTO-1

Ohio EPA NPDES Permit Number: 21F00004

USEPA NPDES Number: OH0002615

TRI Facility ID Number: 45805BPCHEMFORTA

Ohio Hazardous Waste Facility Number: 03-02-0450

AREA SOURCE: Urea Contiguous Process Unit (indicated by the shaded area)
BPCI Coordinates (indicated by the red dot): W6100 ; S4500
Square Footage of the Area Source: 455,000 sqft

Continuous Releases subject to section 103(f) of CERCLA from this area source are as follows:

| <u>Chemical Name</u> | <u>Media</u> | <u>Quantity per Day</u> |
|----------------------|--------------|-------------------------|
| Ammonia | Air | 4,587.00 pounds |

All releases reported in this notification are from continuous process equipment, regularly occurring batch processes, regularly anticipated process start-ups and shutdowns, and continuous fugitive sources. Within normal variation, these releases are continuous during operations. The continuity, quantity and regularity of these releases has been established based on historic sampling, engineering calculations, and knowledge of the processes at the plant site. Differences from previous reports are due to improved estimates of releases, results of ongoing waste minimization programs, and the additions of pollution control equipment and operating procedures. The attached tables provide the best estimates of the continuous releases of the applicable substances for the 1992 calendar year.

Ammonia (7664-41-7)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release * Lower Bound (lb/day) | Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|--------------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|------------------------|---|-------------------|-----------------------|-----------------------------------|
| 1 | P064 | Urea | UTI Hotwell | Air | Continuous | All | Fugitive Source | 24 | 8322 | 33 | | | | 7.00 | | 23.18 | 7,882 |
| 2 | P064 | Urea | UTI Hotwell | Air | Continuous | All | Process Stack | 24 | 8322 | 66.4 | 0.50 | 581 | 49.34 | 50.00 | | 262.45 | 89,232 |
| 3 | P063 | Urea | Reactor Feed Section | Air | Continuous | All | Process Stack | 24 | 8322 | 66 | 2.00 | 64000 | 339.70 | 15.00 | | 75.48 | 25,662 |
| 4 | P063 | Urea | Reactor Feed Section | Air | Continuous | All | Fugitive Source | 24 | 8322 | 33 | | | | 3.00 | | 14.49 | 4,927 |
| 5 | P060 | Urea | Prill Tower, Chem Grade | Air | Continuous | All | Fugitive Source | 24 | 4104 | 83 | | | | 5.00 | | 25.94 | 8,818 |
| 6 | P060 | Urea | Prill Tower, Feed Grade | Air | Continuous | All | Process Stack | 24 | 488 | 166 | 6.38 | 200000 | 104.32 | 15.00 | | 76.66 | 26,131 |
| 7 | P060 | Urea | Prill Tower, Chem Grade | Air | Continuous | All | Process Stack | 24 | 4104 | 165 | 6.38 | 200000 | 104.32 | 50.00 | | 217.63 | 73,995 |
| 8 | P047 | Urea | Prill Tower, Feed Grade | Air | Continuous | All | Fugitive Source | 24 | 488 | 83 | | | | 0.30 | | 1.29 | 440 |
| 9 | P047 | Urea | Evaporator Unit | Air | Continuous | All | Fugitive Source | 24 | 8322 | 100 | 2.33 | 15000 | 58.66 | 50.00 | | 1933.64 | 657,438 |
| 10 | P046 | Urea | Granulator Unit | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 6.00 | 48200 | 28.43 | 50.00 | | 734.29 | 249,660 |
| 11 | P029 | Urea | Surge/Conc/Run Tanks | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 2.00 | 100 | 0.53 | 10.00 | | 48.53 | 16,500 |
| 12 | P029 | Urea | Surge/Conc/Run Tanks | Air | Continuous | All | Fugitive Source | 24 | 8322 | 110 | 2.00 | | | 10.00 | | 71.51 | 24,313 |
| 13 | P028 | Urea | Surge/Conc/Run Tanks | Air | Continuous | All | Process Stack | 24 | 8322 | 55 | | | | 5.00 | | 21.56 | 7,332 |
| 14 | P028 | Urea | Crystallizer | Air | Continuous | All | Fugitive Source | 24 | 8322 | 100 | 0.25 | 69 | 23.44 | 5.00 | | 19.54 | 6,643 |
| 15 | P027 | Urea | Lump Dissolving Tank | Air | Continuous | All | Fugitive Source | 24 | 8322 | 6 | | | | 1.00 | | 13.97 | 4,751 |
| 16 | P027 | Urea | Lump Dissolving Tank | Air | Continuous | All | Process Stack | 24 | 8322 | 12 | 0.67 | 1 | 0.05 | 4.00 | | 38.82 | 13,198 |
| 17 | P026 | Urea | Synthesis Section | Air | Continuous | All | Process Stack | 24 | 8322 | 110 | 2.00 | 7504 | 39.83 | 25.00 | | 263.37 | 89,545 |
| 18 | P026 | Urea | Synthesis Section | Air | Continuous | All | Fugitive Source | 24 | 8322 | 55 | | | | 3.00 | | 196.24 | 66,722 |
| 19 | P025 | Urea | Mother Liquor Tank | Air | Continuous | All | Fugitive Source | 24 | 8322 | 20 | | | | 2.00 | | 12.29 | 4,179 |
| 20 | P024 | Urea | Mother Liquor Tank | Air | Continuous | All | Process Stack | 24 | 8322 | 40 | 1.00 | 149 | 3.16 | 5.00 | | 43.13 | 14,664 |
| 21 | P024 | Urea | Prill Dryer Cyclone | Air | Continuous | All | Process Stack | 24 | 8322 | 240 | 4.00 | 30159 | 40.02 | 50.00 | | 447.92 | 152,293 |
| 22 | P024 | Urea | Prill Dryer Cyclone | Air | Continuous | All | Fugitive Source | 24 | 8322 | 110 | 4.00 | 30159 | 40.02 | 0.10 | | 0.67 | 227 |
| 23 | NA | Urea | Building Exhaust Fans -F | Air | Continuous | All | Point Source | 24 | 8322 | 25 | 6.00 | 49 | 0.03 | Included | | Included | Included |
| 24 | NA | Urea | Building Exhaust Fans -D | Air | Continuous | All | Point Source | 24 | 8322 | 30 | 6.00 | 49 | 0.03 | Included | | Included | Included |
| 25 | NA | Urea | Building Exhaust Fans -E | Air | Continuous | All | Point Source | 24 | 8322 | 25 | 6.00 | 49 | 0.03 | Included | | Included | Included |
| 26 | NA | Urea | Building Exhaust Fans -A | Air | Continuous | All | Point Source | 24 | 8322 | 30 | 6.00 | 49 | 0.03 | 4.00 | | 43.79 | 14,889 |
| 27 | NA | Urea | Building Exhaust Fans -C | Air | Continuous | All | Point Source | 24 | 8322 | 30 | 6.00 | 49 | 0.03 | Included | | Included | Included |
| 28 | NA | Urea | Building Exhaust Fans -B | Air | Continuous | All | Point Source | 24 | 8322 | 30 | 6.00 | 49 | 0.03 | Included | | Included | Included |

Ammonia (7664-41-7)
 Subtotal For SSI Trigger Determination:
 Urea Continguous Pr Pounds 4,587
 Tons 2

Formaldehyde (50-00-0)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release * Lower Bound (lb/day) | Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|-------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|------------------------|---|-------------------|-----------------------|-----------------------------------|
| 29 | T060 | Urea | Formaldehyde Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 20 | 0.17 | 0.04 | 0.03 | 4.00 | | 27.17 | 9,238 |
| 30 | T060 | Urea | Formaldehyde Tank | Air | Continuous | All | Fugitive Source | 24 | 8322 | 5 | | | | 0.10 | | 0.44 | 150 |

Formaldehyde (50-00-0)
 Subtotal For SSI Trigger Determination:
 Urea Continguous Pr Pounds 28
 Tons 0

BP Chemicals, Inc.
Lima, Ohio
Notification of Continuous Release of Hazardous Substances
Pursuant to Section 103(f) of CERCLA
Reported By Area Source Designation

General Information

Facility Name: BP Chemicals, Inc.
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County: Allen **Township:** Shawnee **Section:** SE/4 Section 2; NE/4 Section 11
Facility Location: Longitude 84° 07' 46" W ; Latitude 40° 43' 0" N
Facility Dun & Bradstreet Number: 03-959-6507
Responsible Official: James W. Walpole
Plant Manager
Telephone Number: 419/226-1200
419/226-1394

Population Density: More than 1,000 persons within one mile radius. An area map is attached.

Population Area: The facility is located in an urban area. Schools, hospitals and retirement communities are located within a one-mile radius of this facility. The nearest potentially sensitive locations are as follows:

- Lima Central Catholic High School
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- Faurot School
- Shawnee Children's Program
- 7th Day Adventist Elementary School
- Lincoln Elementary School
- Hanley House Nursing Home

Water Body: Ottawa River; 50 year average flow = 126 cfs

APPLICABLE SITE PERMITS:

USEPA ID Number: OHD042157644

OHIO EPA APS Premise Number: 0303030015

Ohio EPA UIC Permit Numbers: UIC 03-02-003-PTO-1, UIC 03-02-004-PTO-1,
UIC 03-02-005-PTO-1, UIC 03-02-006-PTO-1

Ohio EPA NPDES Permit Number: 21F00004

USEPA NPDES Number: OH0002615

TRI Facility ID Number: 45805BPCHEMFORTA

Ohio Hazardous Waste Facility Number: 03-02-0450

AREA SOURCE: Blending and Shipping Contiguous Process Unit (indicated by the shaded area)

BPCI Coordinates (indicated by the red dot): W5400 ; S4200

Square Footage of the Area Source: 137,500 sqft

Continuous Releases subject to section 103(f) of CERCLA from this area source are as follows:

| <u>Chemical Name</u> | <u>Media</u> | <u>Quantity per Day</u> |
|----------------------|--------------|-------------------------|
| Ammonia | Air | 1,875.00 pounds |

All releases reported in this notification are from continuous process equipment, regularly occurring batch processes, regularly anticipated process start-ups and shutdowns, and continuous fugitive sources. Within normal variation, these releases are continuous during operations. The continuity, quantity and regularity of these releases has been established based on historic sampling, engineering calculations, and knowledge of the processes at the plant site. Differences from previous reports are due to improved estimates of releases, results of ongoing waste minimization programs, and the additions of pollution control equipment and operating procedures. The attached tables provide the best estimates of the continuous releases of the applicable substances for the 1992 calendar year.

Ammonia (7664-41-7)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Estimate (lb/day) | Lower Bound (lb/day) | Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|-----------------------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|------------------------|-------------------|----------------------|----------------------|-----------------------------------|
| 1 | T064 | BS&S | NH4NO3 T-22 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 40 | 0.30 | 0.14 | 0.03 | 0.70 | 0.36 | 3.36 | 1,144 |
| 2 | T063 | BS&S | Aqua Ammonia T-29 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 26 | 0.30 | 0.14 | 0.03 | 2.00 | 10.31 | 10.31 | 3,504 |
| 3 | T062 | BS&S | Aqua Ammonia T-28 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 26 | 0.30 | 0.14 | 0.03 | 2.00 | 10.31 | 10.31 | 3,504 |
| 4 | T061 | BS&S | Aqua Ammonia T-27 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 26 | 0.30 | 0.14 | 0.03 | 2.00 | 10.31 | 10.31 | 3,504 |
| 5 | T059 | BS&S | NH4NO3 T-21 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 40 | 0.30 | 0.14 | 0.03 | 0.40 | 1.67 | 1.67 | 569 |
| 6 | T058 | BS&S | Urea T-54 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.30 | 0.14 | 0.03 | 0.20 | 0.74 | 0.74 | 252 |
| 7 | T058 | BS&S | Urea T-52 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.30 | 0.14 | 0.03 | 0.20 | 0.74 | 0.74 | 252 |
| 8 | T058 | BS&S | Urea T-53 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.30 | 0.14 | 0.03 | 0.20 | 0.74 | 0.74 | 252 |
| 9 | T058 | BS&S | Urea T-51 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.30 | 0.14 | 0.03 | 0.20 | 0.74 | 0.74 | 252 |
| 10 | T057 | BS&S | NH4NO3 T-9 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.30 | 0.14 | 0.03 | 0.03 | 0.13 | 0.13 | 44 |
| 11 | T057 | BS&S | NH4NO3 T-9 Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.30 | 0.14 | 0.03 | 0.03 | 0.13 | 0.13 | 44 |
| 12 | T056 | BS&S | Aqua Ammonia T-41 | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.30 | 0.14 | 0.03 | 0.00 | 0.00 | 0.00 | 0 |
| 13 | T054 | BS&S | Aqua Loading T-7 | Air | Continuous | All | Tank Vent | 24 | 8322 | 12 | 0.30 | 0.14 | 0.03 | 4.00 | 28.99 | 28.99 | 9,855 |
| 14 | T053 | BS&S | Aqua T-26 | Air | Continuous | All | Tank Vent | 24 | 8322 | 26 | 0.30 | 0.14 | 0.03 | 2.00 | 10.31 | 10.31 | 3,504 |
| 15 | T050 | BS&S | 2800 Solution T-20 | Air | Continuous | All | Tank Vent | 24 | 8322 | 46 | 0.30 | 0.14 | 0.03 | 0.40 | 1.55 | 1.55 | 526 |
| 16 | T049 | BS&S | 2800 Solution D-2 | Air | Continuous | All | Tank Vent | 24 | 8322 | 12 | 0.30 | 0.14 | 0.03 | 0.01 | 0.05 | 0.05 | 18 |
| 17 | T049 | BS&S | 2800 Solution D-1 | Air | Continuous | All | Tank Vent | 24 | 8322 | 12 | 0.30 | 0.14 | 0.03 | 0.01 | 0.05 | 0.05 | 18 |
| 18 | T049 | BS&S | 2800 Solution D-3 | Air | Continuous | All | Tank Vent | 24 | 8322 | 12 | 0.30 | 0.14 | 0.03 | 0.01 | 0.05 | 0.05 | 18 |
| 19 | T048 | BS&S | 2800 Solution T-23 | Air | Continuous | All | Tank Vent | 24 | 8322 | 12 | 0.30 | 0.14 | 0.03 | 0.40 | 1.80 | 1.80 | 613 |
| 20 | T047 | BS&S | Urea Solution T-55 | Air | Continuous | All | Tank Vent | 24 | 8322 | 36 | 0.30 | 0.14 | 0.03 | 6.90 | 4.38 | 4.38 | 1,489 |
| 21 | T046 | BS&S | Urea Tank #10 | Air | Continuous | All | Tank Vent | 24 | 8322 | 24 | 0.30 | 0.14 | 0.03 | 50.00 | 672.46 | 672.46 | 228,636 |
| 22 | T044 | BS&S | Surge Tank T-9 | Air | Continuous | All | Tank Vent | 24 | 8322 | 7 | 0.30 | 0.14 | 0.03 | 0.01 | 0.07 | 0.07 | 24 |
| 23 | T044 | BS&S | Surge Tank T-8 | Air | Continuous | All | Tank Vent | 24 | 8322 | 7 | 0.30 | 0.14 | 0.03 | 0.01 | 0.07 | 0.07 | 24 |
| 24 | T043 | BS&S | Slop Recovery T-60 | Air | Continuous | All | Tank Vent | 24 | 8322 | 7 | 0.30 | 0.14 | 0.03 | 0.05 | 0.26 | 0.26 | 88 |
| 25 | T040 | BS&S | Urea Recovery T-61 | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.30 | 0.14 | 0.03 | 0.05 | 0.25 | 0.25 | 84 |
| 26 | T038 | BS&S | NH4NO3 T-13A | Air | Continuous | All | Tank Vent | 24 | 8322 | 35 | 0.30 | 0.14 | 0.03 | 0.01 | 0.09 | 0.09 | 30 |
| 27 | T038 | BS&S | NH4NO3 T-14 | Air | Continuous | All | Tank Vent | 24 | 8322 | 35 | 0.30 | 0.14 | 0.03 | 0.01 | 0.09 | 0.09 | 30 |
| 28 | T038 | BS&S | NH4NO3 T-13 | Air | Continuous | All | Tank Vent | 24 | 8322 | 35 | 0.30 | 0.14 | 0.03 | 0.01 | 0.09 | 0.09 | 30 |
| 29 | T018 | BS&S | Ammonia T-6 | Air | Continuous | All | Tank Vent | 24 | 8322 | 64 | 0.30 | 0.14 | 0.03 | 0.30 | 1.29 | 1.29 | 438 |
| 30 | T018 | BS&S | Ammonia T-5 | Air | Continuous | All | Tank Vent | 24 | 8322 | 64 | 0.30 | 0.14 | 0.03 | 0.30 | 1.29 | 1.29 | 438 |
| 31 | P059 | BS&S | Fertilizer Solution Loading | Air | Continuous | All | Point Source | 24 | 8322 | 20 | 0.33 | 0.15 | 0.03 | 0.02 | 0.10 | 0.10 | 35 |
| 32 | P058 | BS&S | NH4NO3 Truck Loading | Air | Continuous | All | Point Source | 24 | 8322 | 20 | 0.33 | 0.15 | 0.03 | 0.10 | 0.51 | 0.51 | 175 |
| 33 | P057 | BS&S | Urea Truck Loading | Air | Continuous | All | Point Source | 24 | 8322 | 20 | 0.33 | 0.15 | 0.03 | 0.03 | 0.13 | 0.13 | 44 |
| 34 | P056 | BS&S | Aqua Truck Loading | Air | Batch | All | Point Source | 24 | 913 | 20 | 0.33 | 0.15 | 0.03 | 0.50 | 69.09 | 69.09 | 23,490 |
| 35 | P055 | BS&S | NH3 Rail Loading | Air | Batch | All | Point Source | 24 | 474 | 0.3 | 0.33 | 0.15 | 0.03 | 0.01 | 0.25 | 0.25 | 86 |
| 36 | P054 | BS&S | NH3 Truck Loading | Air | Batch | All | Point Source | 24 | 6411 | 0.3 | 0.33 | 0.15 | 0.03 | 0.01 | 1.87 | 1.87 | 636 |
| 37 | P053 | BS&S | NH4NO3 Evaporator | Air | Continuous | All | Process Stack | 24 | 8322 | 50 | 0.33 | 0.15 | 0.03 | 50.00 | 1040.89 | 1040.89 | 353,904 |

Ammonia (7664-41-7)
 Subtotal For SSI Trigger Determination:
 Blending and Shipping Pounds
 Per Day 1,875
 1
 319

BP Chemicals, Inc.
Lima, Ohio
Notification of Continuous Release of Hazardous Substances
Pursuant to Section 103(f) of CERCLA
Reported By Area Source Designation

General Information

Facility Name: BP Chemicals, Inc.
Facility Location: Lima, Ohio
Facility Address: Fort Amanda and Adgate Roads -- Lima, Ohio 45804
Mailing Address: P.O. Box 628 -- Lima, Ohio 45802-0628
County: Allen **Township:** Shawnee Section: SE/4 Section 2; NE/4 Section 11
Facility Location: Longitude 84° 07' 46" W ; Latitude 40° 43' 0" N
Facility Dun & Bradstreet Number: 03-959-6507
Responsible Official: James W. Walpole
Plant Manager
Telephone Number: 419/226-1200
419/226-1394

Population Density: More than 1,000 persons within one mile radius. An area map is attached.

Population Area: The facility is located in an urban area. Schools, hospitals and retirement communities are located within a one-mile radius of this facility. The nearest potentially sensitive locations are as follows:

- Lima Central Catholic High School
- St. Rita's Medical Center
- Whittier School
- Shawnee Manor Nursing Home
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- Shawnee Children's Program
- 7th Day Adventist Elementary School
- Lincoln Elementary School
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Water Body: Ottawa River; 50 year average flow = 126 cfs

APPLICABLE SITE PERMITS:

USEPA ID Number: OHD042157644

OHIO EPA APS Premise Number: 0303030015

Ohio EPA UIC Permit Numbers: UIC 03-02-003-PTO-1, UIC 03-02-004-PTO-1,
UIC 03-02-005-PTO-1, UIC 03-02-006-PTO-1

Ohio EPA NPDES Permit Number: 21F00004

USEPA NPDES Number: OH0002615

TRI Facility ID Number: 45805BPCHEMFORTA

Ohio Hazardous Waste Facility Number: 03-02-0450

AREA SOURCE: Ammonia Contiguous Process Unit (indicated by the shaded area)

BPCI Coordinates (indicated by the red dot): W6150 ; S3800

Square Footage of the Area Source: 292,500 sqft

Continuous Releases subject to section 103(f) of CERCLA from this area source are as follows:

| <u>Chemical Name</u> | <u>Media</u> | <u>Quantity per Day</u> |
|----------------------|--------------|-------------------------|
| Ammonia | Air | 1,411.00 pounds |
| Chlorine | Air | 22.00 pounds |
| Ethylene Glycol | Air | 10.00 pounds |
| Diethanolamine | Air | 81.00 pounds |
| Hydroquinone | Air | 1.22 pounds |
| Nitrogen Oxides | Air | 9,100.00 pounds |
| Sulfur Dioxide | Air | 16.00 pounds |

All releases reported in this notification are from continuous process equipment, regularly occurring batch processes, regularly anticipated process start-ups and shutdowns, and continuous fugitive sources. Within normal variation, these releases are continuous during operations. The continuity, quantity and regularity of these releases has been established based on historic sampling, engineering calculations, and knowledge of the processes at the plant site. Differences from previous reports are due to improved estimates of releases, results of ongoing waste minimization programs, and the additions of pollution control equipment and operating procedures. The attached tables provide the best estimates of the continuous releases of the applicable substances for the 1992 calendar year.

Ammonia (7664-41-7)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|---|---------------|---------------|---------------------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|----------------------|-----------------------------------|
| 1 | P023 | Ammonia | Cond Purification Section | Air | Continuous | All | Process Stack | 24 | 8322 | 85 | 0.67 | 770 | 36.42 | 10.00 | 1101.44 | 374,490 |
| 2 | P022 | Ammonia | Synthesis Section | Air | Continuous | All | Fugitive Source | 24 | 8322 | 5 | 1.17 | 25 | 0.39 | 5.00 | 264.84 | 90,044 |
| 3 | P022 | Ammonia | Synthesis Section | Air | Continuous | All | Process Stack | 24 | 8322 | 180 | 1.50 | 1084 | 10.23 | 1.00 | 10.52 | 3,578 |
| 4 | P021 | Ammonia | Purification Section | Air | Continuous | All | Process Stack | 24 | 8322 | 180 | 1.17 | 25 | 0.39 | 2.00 | 24.47 | 8,320 |
| 5 | P020 | Ammonia | Reforming Section | Air | Continuous | All | Process Stack | 24 | 8322 | 180 | 1.33 | 600 | 7.20 | 1.00 | 9.74 | 3,311 |
| Ammonia (7664-41-7) Subtotal For SSI Trigger Determination: Ammonia Continuous Pounds Tons | | | | | | | | | | | | | | Per Day | 1,411 | 479,744 |
| | | | | | | | | | | | | | | | 1 | 240 |

Nitrogen Oxides (10102-44-0)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|--|---------------|---------------|-------------------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|----------------------|-----------------------------------|
| 6 | B006 | Ammonia | Ammonia Gas Turbine | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 4.63 | 33000 | 32.68 | 1.00 | 445.59 | 151,500 |
| 7 | B005 | Ammonia | Ammonia Load Heater | Air | Batch | All | Process Stack | 24 | 84 | 40 | 1.66 | 18944 | 145.96 | 0.00 | 7.12 | 2,420 |
| 8 | B004 | Ammonia | Ammonia Start-up Heater | Air | Batch | All | Process Stack | 24 | 15 | 100 | 4.00 | 19500 | 25.88 | 0.00 | 177.88 | 60,480 |
| 9 | B003 | Ammonia | Reformer Furnance | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 5.00 | 280940 | 238.59 | 1500.00 | 7352.94 | 2,500,060 |
| 10 | B002 | Ammonia | Ammonia #2 Boiler | Air | Continuous | All | Process Stack | 24 | 8322 | 50 | 2.90 | 43800 | 110.58 | 100.00 | 558.09 | 189,750 |
| 11 | B001 | Ammonia | Ammonia #1 Boiler | Air | Continuous | All | Process Stack | 24 | 8322 | 50 | 2.90 | 46850 | 118.27 | 100.00 | 558.09 | 189,750 |
| Nitrogen Oxides (10102-44-0) Subtotal For SSI Trigger Determination: Ammonia Continuous Pounds Tons | | | | | | | | | | | | | | Per Day | 9,100 | 3,093,900 |
| | | | | | | | | | | | | | | | 5 | 1,547 |

Sulfur Dioxide (7446-09-5)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|--|---------------|---------------|-------------------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|----------------------|-----------------------------------|
| 12 | B006 | Ammonia | Ammonia Gas Turbine | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 4.63 | 33000 | 32.68 | 0.00 | 2.35 | 800 |
| 13 | B005 | Ammonia | Ammonia Load Heater | Air | Batch | All | Process Stack | 24 | 84 | 40 | 1.66 | 18944 | 145.96 | 0.00 | 0.74 | 250 |
| 14 | B004 | Ammonia | Ammonia Start-up Heater | Air | Batch | All | Process Stack | 24 | 15 | 100 | 4.00 | 19500 | 25.88 | 0.00 | 0.76 | 260 |
| 15 | B003 | Ammonia | Reformer Furnance | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 5.00 | 280940 | 238.59 | 0.00 | 7.35 | 2,500 |
| 16 | B002 | Ammonia | Ammonia #2 Boiler | Air | Continuous | All | Process Stack | 24 | 8322 | 50 | 2.90 | 43800 | 110.58 | 0.00 | 2.50 | 850 |
| 17 | B001 | Ammonia | Ammonia #1 Boiler | Air | Continuous | All | Process Stack | 24 | 8322 | 50 | 2.90 | 46850 | 118.27 | 0.00 | 2.50 | 850 |
| Sulfur Dioxide (7446-09-5) Subtotal For SSI Trigger Determination: Ammonia Continuous Pounds Tons | | | | | | | | | | | | | | Per Day | 16 | 5,510 |
| | | | | | | | | | | | | | | | 0 | 3 |

Diethanolamine (111-42-2)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|------------------------------|-------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|------------------------|--------------------------------------|-----------------------|-----------------------------------|
| 18 | P021 | Ammonia Purification Section | | Air | Continuous | All | Process Stack | 24 | 8322 | 180 | 1.17 | 25 | 0.39 | 1.00 | 81.02 | 27,546 |

Diethanolamine (111-42-2)
 Subtotal For SSI Trigger Determination:
 Ammonia Continguous Pounds
 Tons

Per Day
 81
 0
 14

Hydroquinone (123-31-9)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|-----------------------|-------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|------------------------|--------------------------------------|-----------------------|-----------------------------------|
| 19 | NA | Ammonia Fugitives | | Air | Continuous | All | Fugitive Source | 24 | 8322 | | | | | 0.00 | 1.22 | 416 |
| 20 | NA | Ammonia Demineralizer | | Water | Continuous | All | Fugitive Source | 24 | 8760 | | | | | 10.59 | 10.59 | 3,600 |

* Receiving body of water is the Ottawa River

Hydroquinone (123-31-9)
 Subtotal For SSI Trigger Determination:
 Ammonia Continguous Pounds
 Tons

Per Day
 12
 0
 2

Chlorine (7782-50-5)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|------------------------------------|-------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|------------------------|--------------------------------------|-----------------------|-----------------------------------|
| 21 | NA | Ammonia Fugitives - Cooling Towers | | Air | Continuous | All | Process Point | 24 | 8322 | 0 | | | | 1.00 | 22.06 | 7,500 |
| 22 | NA | Ammonia Cooling Tower Blowdown | | Water | Continuous | All | Process Point | 24 | 8760 | | | | | 0.10 | 1.10 | 374 |

* Receiving body of water is the Ottawa River

Chlorine (7782-50-5)
 Subtotal For SSI Trigger Determination:
 Ammonia Continguous Pounds
 Tons

Per Day
 23
 0
 4

Ethylene Glycol (107-21-1)

| Source Number | Permit Area | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release Estimate Lower Bound (lb/day) | Continuous Release Estimate Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|---------------|-------------|-------------------------|-------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|------------------------|--|--|-----------------------------------|
| 23 | NA | Ammonia Cooling Systems | | *Water | Continuous | All | Process Point | 24 | 8760 | | | | | 0.00 | 10.00 | 1,000 |

* Receiving body of water is the Ottawa River

Ethylene Glycol (107-21-1)
 Subtotal For SSI Trigger Determination:
 Ammonia Continuous Pounds
 Tons

| | |
|---------|----|
| Per Day | 10 |
| | 0 |
| | 1 |

BP Chemicals, Inc.
Lima, Ohio
Notification of Continuous Release of Hazardous Substances
Pursuant to Section 103(f) of CERCLA
Reported By Area Source Designation

General Information

Facility Name: BP Chemicals, Inc.
Facility Location: Lima, Ohio
Facility Address: Fort Amanda and Adgate Roads -- Lima, Ohio 45804
Mailing Address: P.O. Box 628 -- Lima, Ohio 45802-0628
County: Allen **Township:** Shawnee Section: SE/4 Section 2; NE/4 Section 11
Facility Location: Longitude 84° 07' 46" W ; Latitude 40° 43' 0" N
Facility Dun & Bradstreet Number: 03-959-6507
Responsible Official: James W. Walpole
Plant Manager
Telephone Number: 419/226-1200
419/226-1394

Population Density: More than 1,000 persons within one mile radius. An area map is attached.

Population Area: The facility is located in an urban area. Schools, hospitals and retirement communities are located within a one-mile radius of this facility. The nearest potentially sensitive locations are as follows:

- Lima Central Catholic High School
- St. Rita's Medical Center
- Whittier School
- Shawnee Manor Nursing Home
- Faurot School
- Shawnee Children's Program
- 7th Day Adventist Elementary School
- Lincoln Elementary School
- Hanley House Nursing Home

Water Body: Ottawa River; 50 year average flow = 126 cfs

APPLICABLE SITE PERMITS:

USEPA ID Number: OHD042157644

OHIO EPA APS Premise Number: 0303030015

Ohio EPA UIC Permit Numbers: UIC 03-02-003-PTO-1, UIC 03-02-004-PTO-1,
UIC 03-02-005-PTO-1, UIC 03-02-006-PTO-1

Ohio EPA NPDES Permit Number: 21F00004

USEPA NPDES Number: OH0002615

TRI Facility ID Number: 45805BPCHEMFORTA

Ohio Hazardous Waste Facility Number: 03-02-0450

AREA SOURCE: Acrylo II Contiguous Process Unit (indicated by the shaded area)
BPCI Coordinates (indicated by the red dot): W4200 ; S3900
Square Footage of the Area Source: 192,500 sqft

Continuous Releases subject to Section 103(f) of CERCLA from this Area source are as follows:

| <u>Chemical Name</u> | <u>Media</u> | <u>Quantity per Day</u> |
|----------------------|--------------|-------------------------|
| Acrylonitrile | Air | 101.00 pounds |
| Hydrogen Cyanide | Air | 37.00 pounds |
| Nitrogen Oxides | Air | 2,853.00 pounds |
| Sulfur Dioxide | Air | 0.22 pounds |

All releases reported in this notification are from continuous process equipment, regularly occurring batch processes, regularly anticipated process start-ups and shutdowns, and continuous fugitive sources. Within normal variation, these releases are continuous during operations. The continuity, quantity and regularity of these releases has been established based on historic sampling, engineering calculations, and knowledge of the processes at the plant site. Differences from previous reports are due to improved estimates of releases, results of ongoing waste minimization programs, and the additions of pollution control equipment and operating procedures. The attached tables provide the best estimates of the continuous releases of the applicable substances for the 1992 calendar year.

Acrylonitrile (107-13-1)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release * | | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|---------------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|------------------------|----------------------|----------------------|-----------------------------------|
| | | | | | | | | | | | | | | Lower Bound (lb/day) | Upper Bound (lb/day) | |
| 1 | T080 | AN-II | #6 Crude Nitrile Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 40 | 0.25 | 0.1 | 0.03 | 0.32 | 1.36 | 464 |
| 2 | T079 | AN-II | #5 Offheat Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 40 | 0.25 | 0.1 | 0.03 | 0.32 | 1.36 | 464 |
| 3 | T070 | AN-II | East Deepwell Surge Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 35 | 0.25 | 0.1 | 0.03 | 0.05 | 1.00 | 341 |
| 4 | T069 | AN-II | West Deepwell Surge Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 35 | 0.25 | 0.1 | 0.03 | 0.05 | 1.00 | 341 |
| 5 | T031 | AN-II | #7 Resin Surge Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 15 | 0.25 | 0.1 | 0.03 | 0.90 | 3.55 | 1,207 |
| 6 | T028 | AN-II | #4 Product Shutdown Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 29 | 0.25 | 0.1 | 0.03 | 0.70 | 2.73 | 928 |
| 7 | T027 | AN-II | #3A Product Shutdown Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 30 | 0.25 | 0.1 | 0.03 | 0.40 | 1.59 | 541 |
| 8 | T026 | AN-II | #3 Product Shutdown Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 29 | 0.25 | 0.1 | 0.03 | 0.40 | 1.59 | 541 |
| 9 | T025 | AN-II | #2A Crude Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 48 | 0.25 | 0.1 | 0.03 | 0.80 | 3.41 | 1,160 |
| 10 | T024 | AN-II | #2 Product Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 48 | 0.25 | 0.1 | 0.03 | 0.60 | 2.50 | 851 |
| 11 | T023 | AN-II | #1 Product Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 48 | 0.25 | 0.1 | 0.03 | 0.60 | 2.50 | 851 |
| 12 | Pend | AN-II | #8 Tank - Stopwater Tank | Air | Continuous | All | Process Slack | 24 | 8322 | 25 | 0.25 | 0.1 | 0.03 | 0.40 | 1.32 | 450 |
| 13 | P035 | AN-II | AOG Incinerator | Air | Continuous | All | Process Slack | 24 | 8322 | 200 | 7.40 | 150000 | 58.16 | 1.00 | 12.41 | 4,220 |
| 14 | P014 | AN-II | Purification Section | Air | Continuous | All | Process Slack | 24 | 8322 | 188 | 2.00 | 3 | 0.02 | 1.00 | 27.30 | 9,282 |
| 15 | P014 | AN-II | Purification Section | Air | Continuous | All | Fugitive Source | 24 | 8322 | 40 | | | | 0.10 | 0.81 | 275 |
| 16 | NA | AN-II | Fugitives from LDAR | Air | Continuous | All | Fugitive Source | 24 | 8322 | 0 | | | | 2.00 | 36.86 | 12,531 |

Acrylonitrile (107-13-1)
 Subtotal For SSI Trigger Determination:
 Acrylonitrile Contiguous Pounds

Per Day Per Year
 101 34,447
 0 17

Hydrogen Cyanide (74-90-8)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release * | | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|-----------------------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|------------------------|----------------------|----------------------|-----------------------------------|
| | | | | | | | | | | | | | | Lower Bound (lb/day) | Upper Bound (lb/day) | |
| 17 | T080 | AN-II | #6 Crude Nitrile Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 50 | 0.25 | 0.1 | 0.03 | 0.35 | 1.36 | 464 |
| 18 | T079 | AN-II | #5 Offheat Product Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 50 | 0.25 | 0.1 | 0.03 | 0.35 | 1.36 | 464 |
| 19 | T025 | AN-II | #2A Crude Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 48 | 0.25 | 0.1 | 0.03 | 0.40 | 1.59 | 541 |
| 20 | Pend | AN-II | #8 Tank - Stopwater Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.25 | 0.1 | 0.03 | 0.20 | 0.74 | 250 |
| 21 | P037 | AN-II | Heads Column | Air | Continuous | All | Fugitive Source | 24 | 8322 | 100 | | | | 0.10 | 0.51 | 175 |
| 22 | P037 | AN-II | Heads Column | Air | Continuous | All | Process Slack | 24 | 7080 | 100 | 9.33 | 29043 | 7.08 | 0.01 | 0.01 | 4 |
| 23 | P035 | AN-II | AOG Incinerator | Air | Continuous | All | Process Slack | 24 | 8322 | 200 | 2.50 | 68721 | 233.33 | 1.00 | 13.98 | 4,550 |
| 24 | P019 | AN-II | HCN Column | Air | Continuous | All | Process Slack | 24 | 8322 | 100 | 9.33 | 29125 | 7.1 | 0.05 | 0.16 | 54 |
| 25 | P019 | AN-II | HCN Column | Air | Continuous | All | Fugitive Source | 24 | 8322 | 50 | | | | 0.50 | 4.09 | 1,392 |
| 26 | P014 | AN-II | Purification Section Flare Header | Air | Continuous | All | Process Slack | 24 | 8322 | 188 | 2.00 | 3 | 65.82 | 1.00 | 12.24 | 4,161 |
| 27 | NA | AN-II | Spent Caustic Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 50 | 0.25 | 0.1 | 0.03 | 0.00 | 1.36 | 464 |
| 28 | NA | AN-II | LDAR Fugitives | Air | Continuous | All | Fugitive Source | 24 | 8322 | 0 | | | | 0.03 | 0.13 | 44 |

Hydrogen Cyanide (74-90-8)
 Subtotal For SSI Trigger Determination:
 Acrylonitrile Contiguous Pounds

Per Day Per Year
 37 12,563
 0 6

Nitrogen Oxides (10102-44-0)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|-----------------------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|-----------------------|-----------------------------------|
| 29 | P035 | AN-II | AOG Incinerator | Air | Continuous | All | Process Stack | 24 | 8322 | 200 | 2.50 | 68721 | 233.33 | 900.00 | 2805.88 | 954,000 |
| 30 | P014 | AN-II | Purification Section Flare Header | Air | Continuous | All | Process Stack | 24 | 8322 | 188 | 0.03 | 3 | 70.77 | 1.00 | 47.06 | 16,000 |

Nitrogen Oxides (10102-44-0)
 Subtotal For SSI Trigger Determination:
 Acrylo II Contiguous Pounds
 Per Day 2,853
 Tons 1
 485

Sulfur Dioxide (7446-09-5)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|-----------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|-----------------------|-----------------------------------|
| 31 | P035 | AN-II | AOG Incinerator | Air | Continuous | All | Process Stack | 24 | 8322 | 200 | 2.50 | 68721 | 233.33 | 0.01 | 0.22 | 75 |

Sulfur Dioxide (7446-09-5)
 Subtotal For SSI Trigger Determination:
 Acrylo II Contiguous Pounds
 Per Day 0
 Tons 0
 75
 0

BP Chemicals, Inc.
Lima, Ohio
Notification of Continuous Release of Hazardous Substances
Pursuant to Section 103(f) of CERCLA
Reported By Area Source Designation

General Information

Facility Name: BP Chemicals, Inc.
Facility Location: Lima, Ohio
Facility Address: Fort Amanda and Adgate Roads -- Lima, Ohio 45804
Mailing Address: P.O. Box 628 -- Lima, Ohio 45802-0628
County: Allen **Township:** Shawnee Section: SE/4 Section 2; NE/4 Section 11
Facility Location: Longitude 84° 07' 46" W ; Latitude 40° 43' 0" N
Facility Dun & Bradstreet Number: 03-959-6507
Responsible Official: James W. Walpole
Plant Manager
Telephone Number: 419/226-1200
419/226-1394

Population Density: More than 1,000 persons within one mile radius. An area map is attached.
Population Area: The facility is located in an urban area. Schools, hospitals and retirement communities are located within a one-mile radius of this facility. The nearest potentially sensitive locations are as follows:

- Lima Central Catholic High School
- St. Rita's Medical Center
- Whittier School
- Shawnee Manor Nursing Home
- Faurot School
- Shawnee Children's Program
- 7th Day Adventist Elementary School
- Lincoln Elementary School
- Hanley House Nursing Home

Water Body: Ottawa River; 50 year average flow = 126 cfs

APPLICABLE SITE PERMITS:

USEPA ID Number: OHD042157644

OHIO EPA APS Premise Number: 0303030015

Ohio EPA UIC Permit Numbers: UIC 03-02-003-PTO-1, UIC 03-02-004-PTO-1,
UIC 03-02-005-PTO-1, UIC 03-02-006-PTO-1

Ohio EPA NPDES Permit Number: 21F00004

USEPA NPDES Number: OH0002615

TRI Facility ID Number: 45805BPCHEMFORTA

Ohio Hazardous Waste Facility Number: 03-02-0450

AREA SOURCE: **Offsite** Contiguous Process Unit (indicated by the shaded area)

BPCI Coordinates (indicated by the red dot): W4450 ; S4400

Square Footage of the Area Source: 100,000 sqft

Continuous Releases subject to section 103(f) of CERCLA from this area source are as follows:

| <u>Chemical Name</u> | <u>Media</u> | <u>Quantity per Day</u> |
|----------------------|--------------|-------------------------|
| Acrylonitrile | Air | 11.00 pounds |
| Ammonia | Air | 150.00 pounds |
| Hydrogen Cyanide | Air | 18.00 pounds |
| Nitrogen Oxides | Air | 244.00 pounds |
| Sulfur Dioxide | Air | 0.22 pounds |

All releases reported in this notification are from continuous process equipment, regularly occurring batch processes, regularly anticipated process start-ups and shutdowns, and continuous fugitive sources. Within normal variation, these releases are continuous during operations. The continuity, quantity and regularity of these releases has been established based on historic sampling, engineering calculations, and knowledge of the processes at the plant site. Differences from previous reports are due to improved estimates of releases, results of ongoing waste minimization programs, and the additions of pollution control equipment and operating procedures. The attached tables provide the best estimates of the continuous releases of the applicable substances for the 1992 calendar year.

Acrylonitrile (107-13-1)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Batches/ | | Stack Height (Ft) | Stack Diameter (Ft) | Stack Dimensions (Ft2) | Exit Temperature (Deg F) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release * | | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|----------------------------------|----------------|--------------|-----------------|------------------|----------|-----------|-------------------|---------------------|------------------------|--------------------------|------------------|------------------------|----------------------|-----------------------|-----------------------------------|
| | | | | | | | | Year | Hours/Day | | | | | | | Estimate (lb/day) | Upper Bound* (lb/day) | |
| 1 | T033 | Offsites | #52 Product Acrylonitrile Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 35 | 0.25 | 0.049 | 51 | 0.1 | 0.03 | 0.60 | 2.30 | 781 |
| 2 | T032 | Offsites | #51 P Product Acrylonitrile Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 35 | 0.25 | 0.049 | 51 | 0.1 | 0.03 | 0.60 | 2.30 | 781 |
| 3 | P051 | Offsites | Drum Loading | Air | Batch | All | Process Point | 24 | 5660 | 0.3 | 0.33 | 0.085 | 51 | 0 | 0.00 | 0.10 | 0.74 | 252 |
| 4 | P050 | Offsites | Truck/Rail Loading | Air | Batch | All | Process Point | 24 | 2068 | 0.3 | 0.33 | 0.085 | 51 | 0 | 0.00 | 0.05 | 0.19 | 65 |
| 5 | NA | Offsites | Fugitives from LDAR | Air | Continuous | All | Fugitive Source | 24 | 8322 | 0 | 0.000 | 0.000 | | | | 1.00 | 5.93 | 2,015 |

Acrylonitrile (107-13-1)
 Subtotal For SSI Trigger Determination:
 Offsites Continuous Process Unit: Pounds 11 3,894
 Tons 0 2

Ammonia (7664-41-7)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Batches/ | | Stack Height (Ft) | Stack Diameter (Ft) | Stack Dimensions (Ft2) | Exit Temperature (Deg F) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release * | | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|----------------|----------------|--------------|-----------------|------------------|----------|-----------|-------------------|---------------------|------------------------|--------------------------|------------------|------------------------|----------------------|-----------------------|-----------------------------------|
| | | | | | | | | Year | Hours/Day | | | | | | | Estimate (lb/day) | Upper Bound* (lb/day) | |
| 6 | T022 | Offsite | Brine Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 18 | 0.20 | 0.031 | 51 | 0.06 | 0.03 | 0.06 | 0.24 | 83 |
| 7 | P049 | Offsite | Brine Stripper | Air | Continuous | All | Process Stack | 24 | 756 | 40 | 0.17 | 0.023 | 180 | 10 | 7.35 | 3.00 | 9.59 | 3,262 |
| 8 | P049 | Offsite | Brine Stripper | Air | Continuous | All | Fugitive Source | 24 | 8322 | 20 | 0.000 | 0.000 | 180 | | | 3.00 | 26.16 | 8,900 |
| 9 | P048 | Offsite | Kill Kettle | Air | Continuous | All | Fugitive Source | 24 | 8322 | 45 | 0.000 | 0.000 | 80 | | | 1.00 | 13.14 | 4,468 |
| 10 | P048 | Offsite | Kill Kettle | Air | Continuous | All | Process Stack | 24 | 666 | 90 | 0.17 | 0.023 | 80 | 24 | 17.63 | 10.00 | 100.76 | 34,265 |

Ammonia (7664-41-7)
 Subtotal For SSI Trigger Determination:
 Offsites Continuous Process Unit: Pounds 150 50,978
 Tons 0 25

Hydrogen Cyanide (74-90-8)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Batches/ | | Stack Height (Ft) | Stack Diameter (Ft) | Stack Dimensions (Ft2) | Exit Temperature (Deg F) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release * | | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|------------------------------|----------------|--------------|-----------------|------------------|----------|-----------|-------------------|---------------------|------------------------|--------------------------|------------------|------------------------|----------------------|-----------------------|-----------------------------------|
| | | | | | | | | Year | Hours/Day | | | | | | | Estimate (lb/day) | Upper Bound* (lb/day) | |
| 11 | P052 | Offsite | HCN Loading Rack | Air | Continuous | All | Fugitive Source | 24 | 8322 | | | | | | | 0.20 | 1.16 | 400 |
| 12 | P015 | Offsite | Batch Still | Air | Batch | All | Process Stack | 24 | 756 | 100 | 9.33 | 68.333 | 1300 | 29125 | 7.1 | 1.50 | 4.74 | 1,612 |
| 13 | P012 | Offsite | Product Column | Air | Continuous | All | Process Stack | 24 | 8322 | 200 | 0.50 | 0.196 | 1300 | 5 | 0.42 | 0.30 | 0.12 | 42 |
| 14 | N001/2 | Offsite | North/South Thermal Oxidizer | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 9.33 | 68.333 | 1300 | 29200 | 7.12 | 0.10 | 0.22 | 75 |
| 15 | N001/2 | Offsite | North/South Thermal Oxidizer | Air | Continuous | All | Fugitive Source | 24 | 8322 | 3 | | | | | | 0.10 | 5.88 | 1,998 |
| 16 | T022 | Offsites | Brine Tank, T-20 | Air | Continuous | All | Tank Vent | 24 | 8322 | 20 | 0.17 | 0.023 | 80 | 24 | 7.1 | 0.05 | 0.29 | 100 |
| 17 | P048 | Offsites | Aceto Kill Kettle | Air | Continuous | All | Process Stack | 24 | 8322 | 90 | 0.17 | 0.023 | 80 | 24 | 7.1 | 1.00 | 5.88 | 2,000 |

Hydrogen Cyanide (74-90-8)
 Subtotal For SSI Trigger Determination:
 Offsites Continuous Process Unit: Pounds 18 6,227
 Tons 0 3

Formaldehyde (50-00-0)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (ft) | Stack Diameter (ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|-------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|-----------------------|-----------------------------------|
| 18 | T088 | Offsites | Formaldehyde Drum | Air | Continuous | All | Fugitive Source | 24 | 8322 | 10 | 0.20 | 0.20 | 1.32 | 0.20 | 1.32 | 450 |
| 19 | T088 | Offsites | Formaldehyde Drum | Air | Continuous | All | Tank Vent | 24 | 8322 | 10 | 0.20 | 0.20 | 1.03 | 0.20 | 1.03 | 350 |
| 20 | P048 | Offsites | Kil Kettle | Air | Continuous | All | Process Stack | 24 | 8322 | 90 | 0.17 | 24 | 17.63 | 1.00 | 5.41 | 1,840 |

Formaldehyde (50-00-0)
 Subtotal For SSI Trigger Determination:
 Offsites Contiguous Pounds Per Day 8
 Tons 0

Nitrogen Oxides (10102-44-0)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (ft) | Stack Diameter (ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|------------------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|-----------------------|-----------------------------------|
| 21 | N0012 | Offsite | North/South Thermal Oxidizer | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 9.33 | 29200 | 7.12 | 40.00 | 244.12 | 83,000 |

Nitrogen Oxides (10102-44-0)
 Subtotal For SSI Trigger Determination:
 Offsites Contiguous Pounds Per Day 244
 Tons 0 42

Sulfur Dioxide (7446-09-5)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (ft) | Stack Diameter (ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|------------------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|-----------------------|-----------------------------------|
| 22 | N0012 | Offsite | North/South Thermal Oxidizer | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 9.33 | 29200 | 7.12 | 0.00 | 0.22 | 75 |

Sulfur Dioxide (7446-09-5)
 Subtotal For SSI Trigger Determination:
 Offsites Contiguous Pounds Per Day 0
 Tons 0 75 0

BP Chemicals, Inc.
Lima, Ohio
Notification of Continuous Release of Hazardous Substances
Pursuant to Section 103(f) of CERCLA
Reported By Area Source Designation

General Information

Facility Name: BP Chemicals, Inc.
Facility Location: Lima, Ohio
Facility Address: Fort Amanda and Adgate Roads -- Lima, Ohio 45804
Mailing Address: P.O. Box 628 -- Lima, Ohio 45802-0628
County: Allen **Township:** Shawnee Section: SE/4 Section 2; NE/4 Section 11
Facility Location: Longitude 84° 07' 46" W ; Latitude 40° 43' 0" N
Facility Dun & Bradstreet Number: 03-959-6507
Responsible Official: James W. Walpole
Plant Manager
Telephone Number: 419/226-1200
419/226-1394

Population Density: More than 1,000 persons within one mile radius. An area map is attached.

Population Area: The facility is located in an urban area. Schools, hospitals and retirement communities are located within a one-mile radius of this facility. The nearest potentially sensitive locations are as follows:

- Lima Central Catholic High School
- St. Rita's Medical Center
- Whittier School
- Shawnee Manor Nursing Home
- Faurot School
- Shawnee Children's Program
- 7th Day Adventist Elementary School
- Lincoln Elementary School
- Hanley House Nursing Home

Water Body: Ottawa River; 50 year average flow = 126 cfs

APPLICABLE SITE PERMITS:

USEPA ID Number: OHD042157644

OHIO EPA APS Premise Number: 0303030015

Ohio EPA UIC Permit Numbers: UIC 03-02-003-PTO-1, UIC 03-02-004-PTO-1,
UIC 03-02-005-PTO-1, UIC 03-02-006-PTO-1

Ohio EPA NPDES Permit Number: 21F00004

USEPA NPDES Number: OH0002615

TRI Facility ID Number: 45805BPCHEMFORTA

Ohio Hazardous Waste Facility Number: 03-02-0450

AREA SOURCE: **Barex** Contiguous Process Unit (indicated by the shaded area)
BPCI Coordinates (indicated by the red dot): W5150 ; S2950
Square Footage of the Area Source: 75,000 sqft

Continuous Releases subject to Section 103(f) of CERCLA from this area source are as follows:

| <u>Chemical Name</u> | <u>Media</u> | <u>Quantity per Day</u> |
|----------------------|--------------|-------------------------|
| Acrylonitrile | Air | 154.00 pounds |
| Nitrogen Oxides | Air | 52.00 pounds |
| Sulfur Dioxide | Air | 0.06 pounds |

All releases reported in this notification are from continuous process equipment, regularly occurring batch processes, regularly anticipated process start-ups and shutdowns, and continuous fugitive sources. Within normal variation, these releases are continuous during operations. The continuity, quantity and regularity of these releases has been established based on historic sampling, engineering calculations, and knowledge of the processes at the plant site. Differences from previous reports are due to improved estimates of releases, results of ongoing waste minimization programs, and the additions of pollution control equipment and operating procedures. The attached tables provide the best estimates of the continuous releases of the applicable substances for the 1992 calendar year.

Acrylonitrile (107-13-1)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (ft) | Stack Diameter (ft) | Exit Flow (ACFM) | Exit Velocity (ft/sec) | Continuous Release Estimate (lb/day) | Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|---|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|------------------------|--------------------------------------|----------------------|-----------------------------------|
| 1 | T019 | Barox | RCM Tank T-18 | Air | Continuous | All | Fugitive Source | 24 | 8322 | 12 | 0.25 | 0.06 | 0.02 | 0.20 | 1.03 | 350 |
| 2 | T019 | Barox | RCM Tank T-8 | Air | Continuous | All | Tank Vent | 24 | 8322 | | | | | 0.40 | 1.67 | 567 |
| 3 | T019 | Barox | RCM Tank T-8 | Air | Continuous | All | Fugitive Source | 24 | 8322 | | | | | 0.10 | 0.67 | 227 |
| 4 | T019 | Barox | RCM Tank T-19 | Air | Continuous | All | Fugitive Source | 24 | 8322 | | | | | 0.10 | 0.89 | 302 |
| 5 | T019 | Barox | RCM Tank T-19 | Air | Continuous | All | Tank Vent | 24 | 8322 | 12 | 0.25 | 0.06 | 0.02 | 0.40 | 2.00 | 680 |
| 6 | T019 | Barox | RCM Tank T-18 | Air | Continuous | All | Tank Vent | 24 | 8322 | 12 | 0.25 | 0.06 | 0.02 | 0.20 | 1.67 | 567 |
| 7 | T001 | Barox | AN Storage Tank | Air | Continuous | All | Tank Vent | 24 | 8322 | 25 | 0.20 | 0.06 | 0.03 | 0.40 | 2.10 | 714 |
| 8 | P069 | Barox | Resin Fines Dryer #2 | Air | Continuous | All | Process Stack | 24 | 8322 | 25 | 0.67 | 10.10 | 47.77 | 0.10 | 0.44 | 151 |
| 9 | P068 | Barox | Paste Line #2 | Air | Continuous | All | Process Stack | 24 | 8322 | 75 | 0.50 | 670 | 73.89 | 0.10 | 0.67 | 227 |
| 10 | P067 | Barox | Resin Reactor #3 | Air | Batch | All | Process Stack | 24 | 708 | 70 | 2.50 | 1200 | 4.08 | 0.40 | 2.18 | 740 |
| 11 | P067 | Barox | Resin Reactor #3 | Air | Continuous | All | Fugitive Source | 24 | 8322 | | | | | 0.40 | 11.44 | 3,889 |
| 12 | P065 | Barox | Strand Dryer #2 | Air | Continuous | All | Process Stack | 24 | 8322 | 80 | 4.00 | 30785 | 40.85 | 4.00 | 29.41 | 10,000 |
| 13 | P043 | Barox | Resin Fines Dryer | Air | Continuous | All | Process Stack | 24 | 8322 | 14 | 0.67 | 10.10 | 47.77 | 0.05 | 0.36 | 121 |
| 14 | P011 | Barox | Resin Strand Dryer | Air | Continuous | All | Process Stack | 24 | 8322 | 80 | 4.00 | 30785 | 40.85 | 4.00 | 29.41 | 10,000 |
| 15 | P010 | Barox | Resin Reactor #2 | Air | Continuous | All | Fugitive Source | 24 | 8322 | 33 | | | | 0.40 | 3.44 | 1,170 |
| 16 | P010 | Barox | Resin Reactor #2 | Air | Batch | All | Process Stack | 24 | 708 | 70 | 2.50 | 1200 | 4.08 | 0.40 | 2.71 | 922 |
| 17 | P009 | Barox | Resin Reactor #1 | Air | Continuous | All | Fugitive Source | 24 | 8322 | 33 | | | | 0.40 | 3.44 | 1,170 |
| 18 | P009 | Barox | Resin Reactor #1 | Air | Batch | All | Process Stack | 24 | 707 | 70 | 2.50 | 1200 | 4.08 | 0.40 | 2.71 | 922 |
| 19 | P005 | Barox | Latex Paste Line | Air | Continuous | All | Process Stack | 24 | 8322 | 77 | 0.50 | 1178 | 100.04 | 0.10 | 0.67 | 227 |
| 20 | P003 | Barox | Barex Elastomer Charging Building Exhaust - Fan C | Air | Continuous | All | Process Stack | 24 | 8322 | 77 | 0.83 | 1 | 0.03 | 0.00 | 0.30 | 102 |
| 21 | NA | Barox | Building Exhaust - Fan C | Air | Continuous | All | Point Source | 24 | 8322 | 70 | 4.00 | 15750 | 20.90 | 2.00 | 10.14 | 3,449 |
| 22 | NA | Barox | Waste Treatment | Air | Continuous | All | Fugitive Source | 24 | 8322 | 0 | | | | 4.00 | 25.99 | 8,635 |
| 23 | NA | Barox | Building Exhaust - Fan A | Air | Continuous | All | Point Source | 24 | 6322 | 70 | 4.00 | 8775 | 11.64 | 2.00 | 10.14 | 3,449 |
| 24 | NA | Barox | Building Exhaust - Fan B | Air | Continuous | All | Point Source | 24 | 8322 | 70 | 4.00 | 5775 | 7.66 | 2.00 | 10.14 | 3,449 |
| 25 | N004 | Barox | Barex Thermal Oxidizer | Air | Continuous | All | Process Stack | 24 | 8322 | 35 | 2.50 | 1200 | 4.08 | 0.01 | 0.01 | 1 |

Acrylonitrile (107-13-1)
 Subtotal For SSI Trigger Determination:
 Barex Continuous Pr Pounds 154
 Tons 0

Per Day 154
 0

Nitrogen Oxides (10102-44-0)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (ft) | Stack Diameter (ft) | Exit Flow (ACFM) | Exit Velocity (ft/sec) | Continuous Release Estimate (lb/day) | Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|------------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|------------------------|--------------------------------------|----------------------|-----------------------------------|
| 26 | N004 | Barox | Barex Thermal Oxidizer | Air | Continuous | All | Process Stack | 24 | 8322 | 35 | 2.50 | 1200 | 4.08 | 10.00 | 51.53 | 17,520 |

Nitrogen Oxides (10102-44-0)
 Subtotal For SSI Trigger Determination:
 Barex Continuous Pr Pounds 52
 Tons 0

Per Day 52
 0

Sulfur Dioxide (7446-09-5)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Year | Stack Height (ft) | Stack Diameter (ft) | Exit Flow (ACFM) | Exit Velocity (ft/sec) | Estimate Lower Bound (lb/day) | Estimate Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|------------------------|----------------|--------------|-----------------|------------------|-----------|------|-------------------|---------------------|------------------|------------------------|-------------------------------|-------------------------------|-----------------------------------|
| 27 | N004 | Barex | Barex Thermal Oxidizer | Air | Continuous | All | Process Stack | 24 | 8322 | 35 | 2.50 | 1200 | 4.08 | 0 | 0.06 | 20 |

Sulfur Dioxide (7446-09-5)
 Subtotal For SSI Trigger Determination:
 Barex Continuous Pr Pounds
 Tons

Per Day
 0
 0
 0

BP Chemicals, Inc.
Lima, Ohio
Notification of Continuous Release of Hazardous Substances
Pursuant to Section 103(f) of CERCLA
Reported By Area Source Designation

General Information

Facility Name: BP Chemicals, Inc.
Facility Location: Lima, Ohio
Facility Address: Fort Amanda and Adgate Roads -- Lima, Ohio 45804
Mailing Address: P.O. Box 628 -- Lima, Ohio 45802-0628
County: Allen **Township:** Shawnee **Section:** SE/4 Section 2; NE/4 Section 11
Facility Location: Longitude 84° 07' 46" W ; Latitude 40° 43' 0" N
Facility Dun & Bradstreet Number: 03-959-6507
Responsible Official: James W. Walpole
Plant Manager
Telephone Number: 419/226-1200
419/226-1394

Population Density: More than 1,000 persons within one mile radius. An area map is attached.

Population Area: The facility is located in an urban area. Schools, hospitals and retirement communities are located within a one-mile radius of this facility. The nearest potentially sensitive locations are as follows:

- Lima Central Catholic High School
- St. Rita's Medical Center
- Whittier School
- Shawnee Manor Nursing Home
- Faurot School
- Shawnee Children's Program
- 7th Day Adventist Elementary School
- Lincoln Elementary School
- Hanley House Nursing Home

Water Body: Ottawa River; 50 year average flow = 126 cfs

APPLICABLE SITE PERMITS:

USEPA ID Number: OHD042157644

OHIO EPA APS Premise Number: 0303030015

Ohio EPA UIC Permit Numbers: UIC 03-02-003-PTO-1, UIC 03-02-004-PTO-1,
UIC 03-02-005-PTO-1, UIC 03-02-006-PTO-1

Ohio EPA NPDES Permit Number: 21F00004

USEPA NPDES Number: OH0002615

TRI Facility ID Number: 45805BPCHEMFORTA

Ohio Hazardous Waste Facility Number: 03-02-0450

AREA SOURCE: Catalyst Plant Contiguous Process Unit (indicated by the shaded area)
BPCI Coordinates (indicated by the red dot): W4650 ; S2900
Square Footage of the Area Source: 37,500 sqft

Continuous Releases subject to section 103(f) of CERCLA from this area source are as follows:

| <u>Chemical Name</u> | <u>Media</u> | <u>Quantity per Day</u> |
|----------------------|--------------|-------------------------|
| Nitrogen Oxides | Air | 374.00 pounds |
| Sulfur Dioxide | Air | 5.00 pounds |

All releases reported in this notification are from continuous process equipment, regularly occurring batch processes, regularly anticipated process start-ups and shutdowns, and continuous fugitive sources. Within normal variation, these releases are continuous during operations. The continuity, quantity and regularity of these releases has been established based on historic sampling, engineering calculations, and knowledge of the processes at the plant site. Differences from previous reports are due to improved estimates of releases, results of ongoing waste minimization programs, and the additions of pollution control equipment and operating procedures. The attached tables provide the best estimates of the continuous releases of the applicable substances for the 1992 calendar year.

Nitrogen Oxides (10102-44-0)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release Estimate Lower Bound (lb/day) | Continuous Release Estimate Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|------------------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|------------------------|--|--|-----------------------------------|
| 1 | P039 | Catalyst | #1 Calciner | Air | Continuous | All | Process Stack | 24 | 8322 | 84 | 3.00 | 4800 | 11.32 | 0.00 | 197.06 | 67,000 |
| 2 | P038 | Catalyst | Venturi Scrubber | Air | Continuous | All | Process Stack | 24 | 8322 | 71 | 3.33 | 10770 | 20.58 | 0.00 | 170.59 | 58,000 |
| 3 | P018 | Catalyst | #2 Calciner | Air | Continuous | All | Process Stack | 24 | 8322 | 71 | 3.33 | 10770 | 20.58 | 0.00 | 3.24 | 1,100 |
| 4 | P016 | Catalyst | Catalyst Plant Reactor | Air | Continuous | All | Process Stack | 24 | 8322 | 80 | 0.25 | 3 | 1.02 | 0.00 | 2.94 | 1,000 |

Nitrogen Oxides (10102-44-0)
 Subtotal For SSI Trigger Determination:
 Catalyst Plant Contin Pounds 374
 Tons 0 64

Sulfur Dioxide (7446-09-5)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (Ft/Sec) | Continuous Release Estimate Lower Bound (lb/day) | Continuous Release Estimate Upper Bound (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|-------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|------------------------|--|--|-----------------------------------|
| 5 | P039 | Catalyst | #1 Calciner | Air | Continuous | All | Process Stack | 24 | 8322 | 84 | 3.00 | 4800 | 11.32 | 0.00 | 2.35 | 800 |
| 6 | P018 | Catalyst | #2 Calciner | Air | Continuous | All | Process Stack | 24 | 8322 | 71 | 3.33 | 10770 | 20.58 | 0.00 | 2.35 | 800 |

Sulfur Dioxide (7446-09-5)
 Subtotal For SSI Trigger Determination:
 Catalyst Plant Contin Pounds 5
 Tons 0 1

BP Chemicals, Inc.
Lima, Ohio
Notification of Continuous Release of Hazardous Substances
Pursuant to Section 103(f) of CERCLA
Reported By Area Source Designation

General Information

Facility Name: BP Chemicals, Inc.
Facility Location: Lima, Ohio
Facility Address: Fort Amanda and Adgate Roads -- Lima, Ohio 45804
Mailing Address: P.O. Box 628 -- Lima, Ohio 45802-0628
County: Allen **Township:** Shawnee Section: SE/4 Section 2; NE/4 Section 11
Facility Location: Longitude 84° 07' 46" W ; Latitude 40° 43' 0" N
Facility Dun & Bradstreet Number: 03-959-6507
Responsible Official: James W. Walpole
Plant Manager
Telephone Number: 419/226-1200
419/226-1394

Population Density: More than 1,000 persons within one mile radius. An area map is attached.

Population Area: The facility is located in an urban area. Schools, hospitals and retirement communities are located within a one-mile radius of this facility. The nearest potentially sensitive locations are as follows:

- Lima Central Catholic High School
- St. Rita's Medical Center
- Whittier School
- Shawnee Manor Nursing Home
- Faurot School
- Shawnee Children's Program
- 7th Day Adventist Elementary School
- Lincoln Elementary School
- Hanley House Nursing Home

Water Body: Ottawa River; 50 year average flow = 126 cfs

APPLICABLE SITE PERMITS:

USEPA ID Number: OHD042157644

OHIO EPA APS Premise Number: 0303030015

Ohio EPA UIC Permit Numbers: UIC 03-02-003-PTO-1, UIC 03-02-004-PTO-1,
UIC 03-02-005-PTO-1, UIC 03-02-006-PTO-1

Ohio EPA NPDES Permit Number: 21F00004

USEPA NPDES Number: OH0002615

TRI Facility ID Number: 45805BPCHEMFORTA

Ohio Hazardous Waste Facility Number: 03-02-0450

AREA SOURCE: Nitric Acid Contiguous Process Unit (indicated by the shaded area)
BPCI Coordinates (indicated by the red dot): W5100 ; S4000
Square Footage of the Area Source: 22,500 sqft

Continuous Releases subject to section 103(f) of CERCLA from this area source are as follows:

| <u>Chemical Name</u> | <u>Media</u> | <u>Quantity per Day</u> |
|----------------------|--------------|-------------------------|
| Nitrogen Oxides | Air | 2,218.00 pounds |
| Ammonia | Air | 1,505.00 pounds |

All releases reported in this notification are from continuous process equipment, regularly occurring batch processes, regularly anticipated process start-ups and shutdowns, and continuous fugitive sources. Within normal variation, these releases are continuous during operations. The continuity, quantity and regularity of these releases has been established based on historic sampling, engineering calculations, and knowledge of the processes at the plant site. Differences from previous reports are due to improved estimates of releases, results of ongoing waste minimization programs, and the additions of pollution control equipment and operating procedures. The attached tables provide the best estimates of the continuous releases of the applicable substances for the 1992 calendar year.

Nitrogen Oxides (10102-44-0)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|--------------------------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|-----------------------|-----------------------------------|
| 1 | P070 | Acid | Nitric Acid Absorber | Air | Continuous | All | Process Stack | 24 | 8322 | 100 | 2.50 | 29240 | 99.33 | 0.00 | 294.12 | 100,000 |
| 2 | P070 | Acid | Nitric Acid Absorber Start-Up | Air | Batch | | Process Stack | 24 | 6 | 100 | 2.50 | 29240 | 99.33 | 0.00 | 1360.00 | 4,140 |
| 3 | P032 | Acid | Nitric Acid Blend/Storage Tank | Air | Continuous | | Process Stack | 24 | 8322 | 40 | 0.17 | 3 | 2.29 | 10.00 | 117.65 | 40,000 |
| 4 | P031 | Acid | Neutralizer/Surge Tank | Air | Continuous | | Process Stack | 24 | 8322 | 40 | 0.83 | 1360 | 41.58 | 5.00 | 426.47 | 145,000 |

Nitrogen Oxides (10102-44-0)
 Subtotal For SSI Trigger Determination:
 Nitric Acid Continguo Pounds Tons
 Per Day 2,218 1
 289,140 145

Ammonia (7664-41-7)

| Source Number | Permit Number | Facility Area | Source Name | Release Medium | Release Type | Activity Months | Release Activity | Hours/Day | Hours/Year | Stack Height (Ft) | Stack Diameter (Ft) | Exit Flow (ACFM) | Exit Velocity (F/Sec) | Continuous Release Estimate (lb/day) | Upper Bound* (lb/day) | Annual Release Estimate (lb/year) |
|---------------|---------------|---------------|--------------------|----------------|--------------|-----------------|------------------|-----------|------------|-------------------|---------------------|------------------|-----------------------|--------------------------------------|-----------------------|-----------------------------------|
| 1 | P031 | Acid | NH4NO3 Neutralizer | Air | Continuous | All | Fugitive Source | 24 | 8322 | 20 | | | | 5.00 | 54.69 | 18,964 |
| 2 | P031 | Acid | NH4NO3 Neutralizer | Air | Continuous | All | Process Stack | 24 | 8322 | 40 | 0.85 | 1360 | 39.97 | 2.00 | 10.91 | 3,783 |
| 3 | T017 | Acid | NH4NO3 Surge Tank | Air | Continuous | All | Process Stack | 24 | 8322 | 10 | 0.30 | 0.14 | 0.03 | 5.00 | 1439.22 | 499,320 |

Ammonia (7664-41-7)
 Subtotal For SSI Trigger Determination:
 Nitric Acid Continguo Pounds Tons
 Per Day 1,505 1
 18,964 9